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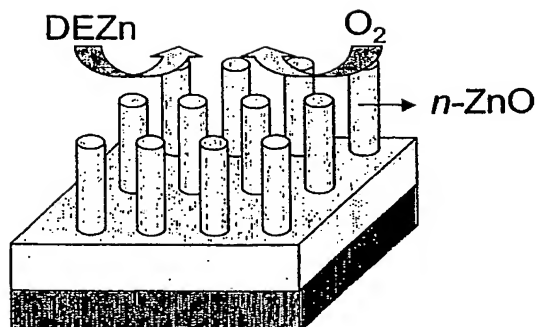
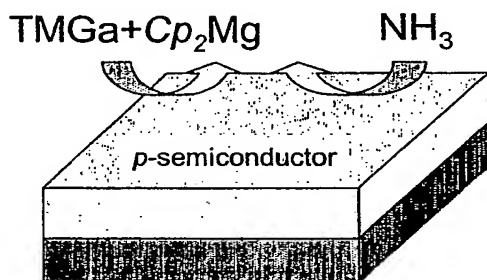
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(54) Title: P-N HETEROJUNCTION STRUCTURE OF ZINC OXIDE-BASED NANOROD AND SEMICONDUCTOR THIN FILM, PREPARATION THEREOF, AND NANO-DEVICE COMPRISING SAME



(57) Abstract: A heterojunction structure composed of a p-type semiconductor thin film and n-type ZnO-based nanorods epitaxially grown thereon exhibits high luminescence efficiency property due to facilitated tunneling of electrons through the nano-sized junction and the use of ZnO having high exciton energy as a light emitting material, and thus it can be advantageously used in nano-devices such as LED, field effect transistor, photodetector, sensor, etc.



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